

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Infosat Communications, Inc.)	
)	File No. SES-LIC-19990128-0034
For Blanket Authorization to operate up to)	
50,000 mobile satellite earth terminals (METs))	
though Canadian-licensed satellite MSAT-1 at)	
106.5 degrees W.L. in frequency bands)	
1631.5 – 1660.5 MHz (transmit) and)	
1530-1559 MHz (receive) throughout the)	
Continental United States, United States)	
Territories, Alaska, and Hawaii)	

ORDER AND AUTHORIZATION

Adopted: January 23, 2002

Released: January 25, 2002

By the Chief, Satellite and Radiocommunication Division:

I. Introduction

1. By this Order, we grant Infosat Communications, Inc. (Infosat) blanket authority, subject to certain conditions, to operate mobile earth terminals (METs), on a non-interference basis, to provide mobile satellite service (MSS) in the United States via a Canadian-licensed satellite operating in portions of the L-band spectrum.¹ Grant of this application will facilitate increased competition in the MSS market, providing U.S. consumers and users, including federal and state governments and agencies, businesses and individual consumers with additional service options as well as other benefits of competition such as lower prices, innovation, and improved service.

II. Background

2. On January 28, 1999, Infosat, a Canadian-owned,² U.S. corporation filed an application

¹ The “L-band” is a general designation for frequencies from 1 to 2 GHz. In this *Order and Authorization*, however, the term “L-band” denotes only the 1545-1559 MHz and 1646.5-1660.5 MHz frequency band (“upper L-band”) and the 1525-1530 MHz, 1530-1544 MHz, and 1626.5-1645.5 MHz frequency bands (“lower L-band”). The United States is the only country that distinguishes between the “upper” and “lower” L-band.

² Infosat is organized under the laws of the state of Delaware. It is a wholly-owned subsidiary of Infosat Communications, Inc., which is a wholly-owned subsidiary of Telesat Canada, which in turn is a wholly-owned subsidiary of BCE, Inc. (BCE), a publicly-held Canadian corporation. See Infosat application Exhibit C and Amendment to Infosat Application Exhibit 1, filed February 6, 2001.

requesting blanket authority to operate up to 50,000 full-duplex³ METs throughout the United States using the Canadian-licensed MSAT-1 satellite at 106.5° W.L. MSAT-1 is owned and operated by TMI Communications and Company, Limited Partnership (TMI), in frequency bands 1626.5-1660.5 MHz (transmit) and 1525-1559 MHz (receive). The METs will be used to provide mobile telephone service to land vehicles, maritime and aeronautical vessels, and temporary fixed stations. According to Infosat, a mobile terminal consists of an antenna, radio transceiver and one or more user interface devices such as mobile telephone handsets, facsimile equipment, or data terminal devices.⁴ Motient Services, Inc. (Motient)⁵ filed a petition to deny Infosat's application, and comments generally supporting Motient's petition were filed by Space System License, Inc. and Iridium LLC (collectively Motorola), Globalstar L.P. (Globalstar), and Norcom Networks Corp. (Norcom), respectively.

III. Discussion

3. In 1997, the United States signed the World Trade Organization (WTO) Agreement on Basic Telecommunication Services. In the WTO Agreement, the United States committed to open its satellite market to foreign satellite systems licensed by WTO-member countries to provide fixed and mobile satellite services (excluding Direct-to-Home Service, Direct Broadcast Satellite Service, and Digital Audio Radio Service). The Commission thereafter adopted the *DISCO II Order*, implementing a framework to examine requests by non-U.S. licensed satellite systems licensed by other WTO-members to serve the U.S. market.⁶ In making a public interest determination, the Commission stated in *DISCO II* that it would take into account factors such as competition in the United States, spectrum availability, eligibility requirements, technical requirements, and national security, law enforcement, foreign policy and trade issues.⁷

4. Each of the opposing parties contends that Infosat has not demonstrated that its operations will be consistent with the *DISCO II* requirements. Briefly, they assert that grant of the application would prevent Motient, the sole U.S. MSS L-band space station licensee, from gaining access to sufficient spectrum to operate a domestic MSS system; that Infosat's proposal does not meet the Commission's requirements for priority and preemptive access for aeronautical and maritime safety communications; and that Infosat will unfairly benefit from enhanced pricing flexibility due to subsidies the Canadian government provides to TMI. Motient also contends that, to the extent Infosat plans to operate as a common carrier, Infosat has failed to obtain the necessary Section 214 authority to provide international MSS to and from mobile terminals located in the United States.⁸ Motient also notes that Infosat has not indicated that it will comply with the rate integration requirements contained in Section 254(g) of the Communications Act, which obligates providers of interstate interexchange telecommunications services

³ A full-duplex MET can receive a data message while transmitting one. Conversely, a half-duplex cannot receive and transmit data messages simultaneously. It must finish transmitting before it can receive an incoming message.

⁴ See Infosat Application Exhibit A.

⁵ When the petition was filed, Motient was named AMSC Subsidiary Corporation (AMSC).

⁶ See *Amendment of the Commission's Regulatory Policies to Allow Non-U.S. Licensed Space Stations to Provide Domestic and International Service in the United States*, Report and Order, 12 FCC Rcd 24094 (1997).

⁷ *Id.* at 24100.

⁸ See 47 USC § 214.

to charge the same rates for these services in every state, including Puerto Rico and the Virgin Islands.⁹ Motorola, Norcom and Globalstar further state that Infosat's application should be denied because it violates the Commission's "freeze" on accepting applications for spectrum coordinated in the lower L-band. Norcom also contends that TMI, rather than Infosat will control the proposed METs and thus effect compliance with all Communication for Law Enforcement Act (CALEA) and E911 requirements.¹⁰ Hence, Norcom submits that TMI will be solely responsible for satisfying these regulatory requirements.¹¹ Lastly, Motorola asserts that the proposed Infosat earth terminals may cause unacceptable out-of-band interference with Motorola's MSS system that operates on nearby frequencies.

5. We note that identical arguments made by the parties here concerning the Commission's L-band spectrum management policy, alleged failure to comply with technical requirements for priority and preemptive access applicable to MSS, issues relating to alleged subsidization of TMI by the Canadian government, and potential out-of-band interference have been raised and have been addressed fully in other L-band proceedings. *See, e.g., SatCom Systems*, 14 FCC Rcd 20798 (1999), *aff'd sub nom. AMSC v. FCC*, 216 F.3d 1154 (D.C. Cir. 2000). We find no reason to depart from the conclusions reached in those decisions. Consequently, we shall confine our discussion to the remaining issues raised by the opponents.

6. We are not persuaded by Motient's assertion that Infosat's application must be denied because Infosat has not obtained an international Section 214 authorization nor demonstrated that it shall comply with the rate regulations of Section 254(g).¹² To the extent that Infosat intends to provide common carrier service, via terminals located in the United States, it will be expected to obtain such Section 214 authority as is deemed necessary prior to offering this service, as well as comply with all other applicable Commission Rules and requirements.¹³ Motient has provided no evidence that Infosat does not intend to comply fully with its regulatory obligations.

7. The assertions of Motorola, Norcom and Globalstar that Infosat's application violates the Commission's "freeze" on accepting applications for spectrum coordinated in the lower L-band, and that grant of its application would afford Infosat an unfair competitive advantage are misplaced. In June 1996, the Commission issued a Notice of Proposed Rulemaking to establish rules and policies for use of spectrum for MSS in the lower L-band.¹⁴ In the *Lower L-band Notice*, the Commission acknowledged that in the course of international coordination, it became clear that the United States would not be able to secure sufficient spectrum in the upper L-band to support Motient's (formerly AMSC) system. The Commission stated that, while it could not guarantee the outcome of international coordination regarding the L-band spectrum, it would attempt to secure sufficient spectrum to ensure that the U.S.-licensed

⁹ *See Policy and Rules Concerning the Interstate, Interexchange Marketplace, Implementation of Section 254(g) of the Communications Act of 1934, as amended*, Report and Order, 11 FCC Rcd 9564 (1996).

¹⁰ *See 47 U.S.C. § 1001 et seq.; Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling System*, Report and Order, 11 FCC Rcd 18676 (1996).

¹¹ *See* Norcom Comment and Informal Objection at 7.

¹² *See* Motient Petition to Deny at 4.

¹³ *See SatCom Systems, Inc.*, 14 FCC Rcd 20798 at ¶ 46.

¹⁴ *See Establishing Rules and Policies for the Use of Spectrum for Mobile Satellite Service in the Upper and Lower L-Band*, Notice of Proposed Rulemaking, 11 FCC Rcd 11675 (1996) (*Lower L-band Notice*).

systems would have a fair opportunity to compete.¹⁵ To facilitate this opportunity, the Commission proposed to modify Motient's authorization to permit it to operate in the lower L-band on spectrum coordinated for U.S. space station licensees. The Commission proposed to allow other parties to apply for assignment of additional spectrum for U.S. space station licenses, assuming the United States would be able to coordinate more than 28 MHz of spectrum in the upper and/or lower L-bands. Should this not be realized, the Commission also proposed a rule under which "it would not now accept applications for spectrum coordinated in the lower L-band."¹⁶

8. The Commission's primary focus in the *Lower L-band Notice* was to ensure that all spectrum coordinated for the U.S. space station license in the lower L-band would be allocated to Motient, the sole U.S. licensee, rather than opened up to applications for additional U.S. space station licensees.¹⁷ Indeed, there was no policy in place governing entry into the U.S. market by non-U.S. satellite systems at that time. Since the initiation of the *Lower L-band Notice*, the Commission issued its *DISCO II* decision, implementing the market opening commitments made by the U.S. in the WTO Agreement. Consequently, we find that, consistent with DISCO II, the public interest is served by granting Infosat's request to provide domestic and international MSS in the entire L-band.¹⁸

9. We also find that an authorization allowing Infosat to operate in the lower L-band will not be significantly affected by policies adopted in the *Lower L-band* proceeding. Nevertheless, the permanent authority granted herein shall not become effective until action in the *Lower L-band* proceeding is finalized. If the Commission's ultimate decision does not require modification of the authorization we grant today, the *Lower L-band* authorization will become effective without any further action by Infosat.¹⁹

10. Lastly, we are not persuaded by Norcom's contention that TMI will be the *de facto* licensee of Infosat's METs by virtue of the fact that TMI operates the relevant space and ground segment facilities. The Commission has granted blanket authority to service providers, such as Infosat, that are not the satellite operator.²⁰ Indeed, the Commission's rules contemplate such arrangements.²¹ Blanket licensees, whether they operate the satellite system or not, are responsible for the compliance of their METs with all the Commission's technical requirements. Infosat, in fact, acknowledges that although TMI will nominally issue operating commands to the Infosat METs, it will be acting at the direction of Infosat. Furthermore, Infosat is fully aware that it will remain responsible for the operation of the METs

¹⁵ *Id.* at ¶ 14.

¹⁶ *Id.* at ¶ 19.

¹⁷ *Id.*

¹⁸ See *In the Matter of COMSAT Corporation d/b/a Comsat Mobile Communications, Application for authority under Section 753(c) of the International Maritime Satellite Act and Section 214 of the Communications Act of 1934, as amended, to establish channels of communication between land earth stations at Brewster, Washington, Santa Paula, California, Southbury, Connecticut and Clarksburg, Maryland and Inmarsat Third generation satellites in the Atlantic Ocean Region in support of Federal Aviation Administration's Wide Area Augmentation System, et. al.*, Memorandum Opinion and Order, FCC 01-272 (released Oct. 9, 2001) at ¶ 77-81. (*Inmarsat Authorization Order*).

¹⁹ *Id.* at ¶ 81.

²⁰ See, e.g., *Geostar Positioning Corp.*, 4 FCC Rcd 4538 (1989).

²¹ See 47 C.F.R. § 25.136(c).

and for compliance with all Commission rules and any other legal requirements pertaining to the METs.²²

11. Our review of Infosat's application indicates that it has met the technical requirements, including the approval of the National Telecommunications and Information Administration (NTIA),²³ to operate the subject METs as it proposes. Infosat's compliance notwithstanding, we shall impose certain conditions on Infosat's operation of these METs to ensure its compliance with these requirements. For example, in the upper L-Band, mobile satellite service operators must comply with a footnote to the U.S. Table of Frequency Allocation and a provision in the ITU's Radio Regulations regarding priority and preemptive access for Aeronautical Mobile Satellite (Route) Service (AMS(R)S)²⁴ operation in a portion of this band.²⁵ Consistent with these requirements, Infosat's operation in the bands 1545-1558.5 and 1646-1660 MHz is on a secondary basis to the U.S. AMS(R)S requirements of other U.S.-authorized MSS providers operating in these bands. In addition, the level of out-of band and spurious emissions from Infosat's METs must be consistent with Section 25.202(f) of the Commission's Rules, 47 C.F.R. § 25.202(f), with the 1994 Memorandum of Understanding among the Commission, the Federal Aviation Administration, and NTIA to protect Global Navigation Satellite Systems (GNSS), and any applicable standards subsequently incorporated in the Commission's rules to protect GNSS.²⁶

IV. Conclusion

12. We find that Infosat has demonstrated that its operations will comport with the *DISCO II* requirements and that it is qualified to hold the blanket earth station authorizations requested. Consequently, we grant Infosat's application, subject to the conditions set forth below, authorizing Infosat to provide MSS service in the United States over the MSAT-1 satellite, using spectrum coordinated by Canada.

²² See Infosat Reply Comments at 2.

²³ See "Summary of L-band Emission Information for Coordination with NTIA," dated May 18, 2001.

²⁴ AMS(R)S is a mobile satellite service using mobile terminals on-board aircraft. This service can be used to support domestic and international air traffic, including air traffic control. The (R) indicates that the spectrum is used for aeronautical communications related to the safety and regularity of flights primarily along national and international civil air routes.

²⁵ Footnote US 308 of the U.S. Table of Frequency Allocations, 47 C.F.R. § 2.106, states: "In the frequency bands 1549.5-1558.5 MHz and 1651-1660 MHz, the Aeronautical-Mobile-Satellite(R) requirements that cannot be accommodated in the 1545-1549.5 MHz, 1558-1559 MHz, 1646.5-1651 MHz and 1660-1660.5 MHz bands shall have priority access with real-time capability for communications in the mobile satellite service. Systems not interoperable with the services shall operate on a secondary basis." S5.357A in the ITU's Radio Regulations has a similar priority and preemptive access requirement. See also, *SatCom Systems, Inc.*, 14 FCC Rcd 20798 at ¶¶ 47-50.

²⁶ See *SatCom Systems, Inc.*, 14 FCC Rcd 20789 at ¶¶ 51-53.

V. Ordering Clauses

13. Accordingly, IT IS ORDERED that Application File No.SES-LIC-19990128-0034 IS GRANTED and Infosat Communications, Inc. IS AUTHORIZED to operate up to 50,000 mobile earth terminals through the Canadian licensed MSAT-1 space station to the extent indicated herein, in accordance with the technical specifications set forth in its application and its Radio Station Authorization, and consistent with the Commission's rules, subject to the conditions set forth below.

14. IT IS FURTHER ORDERED that Infosat Communications, Inc. IS AUTHORIZED to operate in the 1525-1530 MHz, 1530-1544 MHz, and 1626.5-1645.5 MHz frequency bands (lower L-band) subject to the following conditions:

- a. Grant of permanent authority to operate in the lower L-band shall not become effective until further action in the *Lower L-band* proceeding, and operation in the lower L-band is subject to any requirements adopted in the *Lower L-band* proceeding;
- b. Operations shall be limited to the portions of the lower L-band coordinated for TMI satellite network in the most recent annual L-band operator-to-operator agreement;

15. IT IS FURTHER ORDERED that in the absence of a continuing annual L-band operator-to-operator coordination agreement, Infosat's operations of METs in the 1530-1559 and 1631.5-1660 MHz band will be on a non-harmful interference basis until a future operator-to-operator agreement is concluded. Infosat Communications, Inc. shall not cause harmful interference to any other lawfully operating satellite or radio facility and shall cease operations upon notification of such interference. Furthermore, Infosat Communications, Inc. must notify all other operators in these frequency bands that it will be operating on a non-harmful interference basis. Infosat Communications, Inc. must also notify its customers in the United States that its operations are on a non-harmful interference basis.

16. IT IS FURTHER ORDERED that Infosat Communications, Inc. must operate its mobile earth terminals in a full-duplex mode and have the following minimum set of capabilities to ensure compliance with US Footnote 308 to Section 2.106 of the Commission's rules, 47 C.F.R. § 2.106, and ITU Radio Regulations S5.357:

- a. All MET transmissions shall have a priority assigned to them that preserves the priority and preemptive access given to aeronautical distress and safety-related communications sharing the band;
- b. Each MET shall be assigned access to a unique technical identification number that will be transmitted upon any attempt to gain access to a system;
- c. After a MET has gained access to a system the mobile terminal shall be under control of a Land Earth Station and shall obtain all channel assignments from it;
- d. All METs that do not continuously monitor a separate signaling channel shall have provisions for signaling within the communications channel;
- e. Each MET shall automatically inhibit its transmissions if it is not correctly receiving a separate signaling channel or signaling within the communications channel from its associated Land Earth Station; and
- f. Each MET shall automatically inhibit its transmissions on any or all channels upon

receiving a channel-shut-off command on a signaling or communications channel it is receiving from its associated Land Earth Station.

17. IT IS FURTHER ORDERED that, in accordance with US Footnote 308, the operation of Infosat Communications, Inc.'s METs, in the bands 1545-1558.5 and 1646.5-1660 MHz, is on a secondary basis to U.S. AMS(R)S requirements of other U.S.-authorized MSS providers operating in the 1545-1559 and 1646.5-1660 MHz bands.

18. IT IS FURTHER ORDERED that Infosat Communications, Inc. will be subject to any applicable out-of-band emission standards subsequently incorporated in the Commission's rules for protection of the Global Navigation Satellite Service.

19. IT IS FURTHER ORDERED that the Petition to Deny of Motient Services, Inc. and the Comments of Space System Licensee, Inc. and Iridium LLC, Globalstar, and Norcom Networks Corporation ARE DENIED.

20. IT IS FURTHER ORDERED that this license shall not vest in the licensee any right to operate Earth stations or use the assigned frequencies beyond the term thereof or in any manner other than authorized herein, and neither the licensee nor the rights granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act.

21. IT IS FURTHER ORDERED that the license term for the mobile earth terminals that are authorized by the *Order and Authorization* be for ten years.

22. IT IS FURTHER ORDERED that Infosat Communications, Inc. be afforded thirty days to decline this authorization. Failure to respond within this period will constitute formal acceptance of the authorization.

FEDERAL COMMUNICATIONS COMMISSION

Thomas S. Tycz
Chief
Satellite and Radiocommunication Division